

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A computer storage medium comprising computer executable instructions for assisting in the creation of clouds that are used to assist in the registration and resolution of peer names in a peer to peer network, the computer executable instructions comprising instructions for creating a[A] Cloud managed class, comprising a scope field, a ScopeID field, a state field, a CloudName field, and an IsCloudNameLocal field.

2. (Currently Amended) The computer storage medium of claim 1~~The Cloud managed class of claim 1~~, wherein the state field contains a CloudState enumeration selected from the group consisting of uninitialized, synchronizing, active, invalid, disabled, stand alone, and connection lost.

3. (Currently Amended) The computer storage medium of claim 1~~The Cloud managed class of claim 1~~, further comprising at least one method exposed thereby selected from the group consisting of an equals method, a GetHashCode method, a GetType method, a ReferenceEquals method, and a ToString method.

4. (Currently Amended) A computer storage medium comprising computer executable instructions for assisting in the creation of clouds that are used to assist in the registration and resolution of peer names in a peer to peer network, the computer executable instructions comprising instructions for creating a[A] CloudWatcher managed class, comprising a CloudWatcher constructor to instantiate a CloudWatcher object.

5. (Currently Amended) The computer storage medium of claim 4,~~The CloudWatcher managed class of claim 4~~, further comprising a CloudChanged event raised when a cloud has changed in scope.

6. (Currently Amended) The computer storage medium of claim 5,~~The CloudWatcher managed class of claim 5~~, wherein the CloudChanged even is raised when a cloud has been created, deleted, and updated.

7. (Currently Amended) The computer storage medium of claim 4, ~~The CloudWatcher managed class of claim 4,~~ further comprising a GetGlobalCloud static method that returns a global cloud.

8. (Currently Amended) The computer storage medium of claim 4, ~~The CloudWatcher managed class of claim 4,~~ further comprising a Get Clouds static method that utilizes a specified scope parameter to retrieve clouds having the specified scope.

9. (Currently Amended) The computer storage medium of claim 4, ~~The CloudWatcher managed class of claim 4,~~ further comprising a Get Clouds static method that retrieves all clouds.

10. (Currently Amended) A computer storage medium comprising computer executable instructions for assisting in the creation of clouds that are used to assist in the registration and resolution of peer names in a peer to peer network, the computer executable instructions comprising instructions for creating a[A] PnrpEndPoint managed class, comprising a PeerName field and an IPEndPoint field.

11. (Currently Amended) The computer storage medium of claim 10, ~~The PnrpEndPoint managed class of claim 10,~~ further comprising a first PnrpEndPoint constructor that creates a peer name that can be used for registration in a cloud.

12. (Currently Amended) The computer storage medium of claim 10, ~~The PnrpEndPoint managed class of claim 10,~~ further comprising a second PnrpEndPoint constructor that utilizes a PeerName parameter, an IPEndPoint, and a cloud parameter to create a peer name that can be used for registration in a cloud.

13. (Currently Amended) The computer storage medium of claim 10, ~~The PnrpEndPoint managed class of claim 10,~~ further comprising at least one method exposed thereby selected from the group consisting of an equals method, a GetHashCode method, a GetType method, a ReferenceEquals method, and a ToString method.

14. (Currently Amended) A computer storage medium comprising computer executable instructions for assisting in the creation of clouds that are used to assist in the registration and resolution of peer names in a peer to peer network, the computer executable instructions comprising instructions for creating a[A] PnrpEndPointRegistration managed class, comprising a PeerName field, an Identity field, a RegistrationState field, a cloud field, and a SynchronizingObject field.

15. (Currently Amended) The computer storage medium of claim 14,~~The PnrpEndPointRegistration managed class of claim 14,~~ further comprising a first PnrpEndPointRegistration constructor that constructs a PnrpEndPointRegistration object.

16. (Currently Amended) The computer storage medium of claim 14,~~The PnrpEndPointRegistration managed class of claim 14,~~ further comprising a second PnrpEndPointRegistration constructor that utilizes a PnrpEndPoint parameter to construct a PnrpEndPointRegistration object.

17. (Currently Amended) The computer storage medium of claim 14,~~The PnrpEndPointRegistration managed class of claim 14,~~ further comprising a third PnrpEndPointRegistration constructor that utilizes a PnrpEndPoint parameter and an Identity parameter to construct a PnrpEndPointRegistration object.

18. (Currently Amended) The computer storage medium of claim 14,~~The PnrpEndPointRegistration managed class of claim 14,~~ further comprising a fourth PnrpEndPointRegistration constructor that utilizes a PnrpEndPoint parameter, an Identity parameter, and a TimeSpan parameter to construct a PnrpEndPointRegistration object.

19. (Currently Amended) The computer storage medium of claim 14,~~The PnrpEndPointRegistration managed class of claim 14,~~ further comprising at least one method exposed thereby selected from the group consisting of a register method, an unregister method, an equals method, a GetHashCode method, a GetType method, a ReferenceEquals method, and a ToString method.

20. (Currently Amended) The computer storage medium of claim 14,~~The PnrpEndPointRegistration managed class of claim 14,~~ further comprising a RegistrationChanged event raised when a PnrpEndPointRegistration object changes state.

21. (Currently Amended) The computer storage medium of claim 20,~~The PnrpEndPointRegistration managed class of claim 20,~~ wherein the RegistrationChanged event is raised when a PnrpEndPointRegistration is unregistered, registered, and failed.

22. (Currently Amended) A computer storage medium comprising computer executable instructions for assisting in the creation of clouds that are used to assist in the registration and resolution of peer names in a peer to peer network, the computer executable instructions comprising instructions for creating a[A] PnrpEndPointResolver managed class, comprising a PeerName field, a Cloud field, a MaxResults field, a ResolveCriteria field, a TimeSpan field, and a SynchronizingObject field.

23. (Currently Amended) The computer storage medium of claim 22,~~The PnrpEndPointResolver managed class of claim 22,~~ further comprising a first PnrpEndPointResolver constructor for constructing a PnrpEndPointResolver object for name resolution.

24. (Currently Amended) The computer storage medium of claim 22,~~The PnrpEndPointResolver managed class of claim 22,~~ further comprising a second PnrpEndPointResolver constructor utilizing a PeerName parameter to construct a PnrpEndPointResolver object for name resolution.

25. (Currently Amended) The computer storage medium of claim 22,~~The PnrpEndPointResolver managed class of claim 22,~~ further comprising a third PnrpEndPointResolver constructor utilizing a PeerName parameter, a Cloud parameter, a MaxResults parameter, a TimeSpan parameter, and at least one ResolveCriteriaFlags parameter to construct a PnrpEndPointResolver object for name resolution.

26. (Currently Amended) The computer storage medium of claim 22,~~The PnrpEndPointResolver managed class of claim 22,~~ further comprising at least one method

exposed thereby selected from the group consisting of a BeginResolution method, an EndResolution method, a resolve method, an equals method, a GetHashCode method, a GetType method, a ReferenceEquals method, and a ToString method.

27. (Currently Amended) The computer storage medium of claim 22,~~The PnrpEndPointResolver managed class of claim 22,~~ further comprising a PeerNameFound event that is raised when a PnrpEndPoint is found.

28. (Currently Amended) The computer storage medium of claim 22,~~The PnrpEndPointResolver managed class of claim 22,~~ further comprising a ResolutionCompleted event that is raised when a when a maximum number of results is reached, when no PnrpEndPoint is found, and when a EndResolution method is called.

29. (Currently Amended) The computer storage medium of claim 22,~~The PnrpEndPointResolver managed class of claim 22,~~ further comprising a first Resolve static method that utilizes a PeerName parameter to return a PnrpEndPoint.

30. (Currently Amended) The computer storage medium of claim 29,~~The PnrpEndPointResolver managed class of claim 29,~~ wherein the first Resolve static method resolves one remote name synchronously.

31. (Currently Amended) The computer storage medium of claim 22,~~The PnrpEndPointResolver managed class of claim 22,~~ further comprising a second Resolve static method that utilizes a PeerName parameter and a Cloud parameter to return a PnrpEndPoint.

32. (Currently Amended) A method of monitoring by a[n] computing device based application a Cloud in a managed framework, the method comprising the steps of:
communicating with a managed CloudWatcher object, the managed CloudWatcher object exposing a constructor for instantiating a CloudWatcher object;
initiating the constructor.

33. (Original) The method of claim 32, wherein the managed CloudWatcher object further exposes static methods for returning a global cloud, for returning a first list of clouds associated with a scope parameter, and for returning a second list of all clouds, the method further comprising the steps of selecting one of the static methods, passing to the managed CloudWatcher object parameters required by the static method, and initiating the static method.

34. (Original) The method of claim 32, wherein the managed CloudWatcher object raises a CloudChanged event when a cloud has been created, deleted, and updated.

35. (Currently Amended) A method of managing by a[n] computing device based application a PnrpEndPoint in a managed framework, the method comprising the steps of:
communicating with a managed PnrpEndPoint object, the managed PnrpEndPoint object exposing at least one constructor for creating a peer name that can be used for registration in a cloud, for creating a peer name that can be used for registration in the cloud from a PeerName parameter, an IPEndPoint parameter, and a cloud parameter;
selecting one of the constructors;
passing to the managed PnrpEndPoint object parameters required by the constructor selected; and
initiating the constructor.

36. (Currently Amended) A method of managing by a[n] computing device based application a PnrpEndPoint in a managed framework, the method comprising the steps of:
communicating with a managed PnrpEndPointRegistration object, the managed PnrpEndPointRegistration object exposing at least one constructor for creating a PnrpEndPointRegistration object, for creating a PnrpEndPointRegistration object utilizing a PnrpEndPoint parameter, for creating a PnrpEndPointRegistration object utilizing a PnrpEndPoint parameter and an Identity parameter, and for creating a PnrpEndPointRegistration object utilizing a PnrpEndPoint parameter, an Identity parameter, and a TimeSpan parameter;
selecting one of the constructors;

passing to the managed PnrpEndPointRegistration object parameters required by the constructor selected; and
initiating the constructor.

37. (Original) The method of claim 36, wherein the PnrpEndPointRegistration object raises a RegistrationChanged event when a PnrpEndPointRegistration object changes state.

38. (Currently Amended) A method of resolving by a[n] computing device based application a PnrpEndPoint in a managed framework, the method comprising the steps of:
communicating with a managed PnrpEndPointResolver object, the managed PnrpEndPointResolver object exposing at least one constructor for constructing a PnrpEndPointResolver object for name resolution, for constructing a PnrpEndPointResolver object utilizing a PeerName parameter, for constructing a PnrpEndPointResolver object utilizing a PeerName parameter, a Cloud parameter, a MaxResults parameter, a TimeSpan parameter, and at least one ResolveCriteriaFlags parameter;
selecting one of the constructors;
passing to the managed PnrpEndPointRegistration object parameters required by the constructor selected; and
initiating the constructor.

39. (Original) The method of claim 38, wherein the PnrpEndPointResolver object raises a PeerNameFound event when a PnrpEndPoint is found.

40. (Original) The method of claim 38, wherein the PnrpEndPointResolver object raises a ResolutionCompleted event when a maximum number of results is reached, when no PnrpEndPoint is found, and when an EndResolution method is called.

41. (Original) The method of claim 38, wherein the PnrpEndPointResolver object further comprises a plurality of static methods to return a PnrpEndPoint based on a PeerName parameter, and to return a PnrpEndPoint based on a PeerName parameter and a Cloud parameter, the method further comprising the steps of selecting one of the static methods,

passing to the managed PnrpEndPointRegistration object parameters required by the static method selected, and initiating the static method.